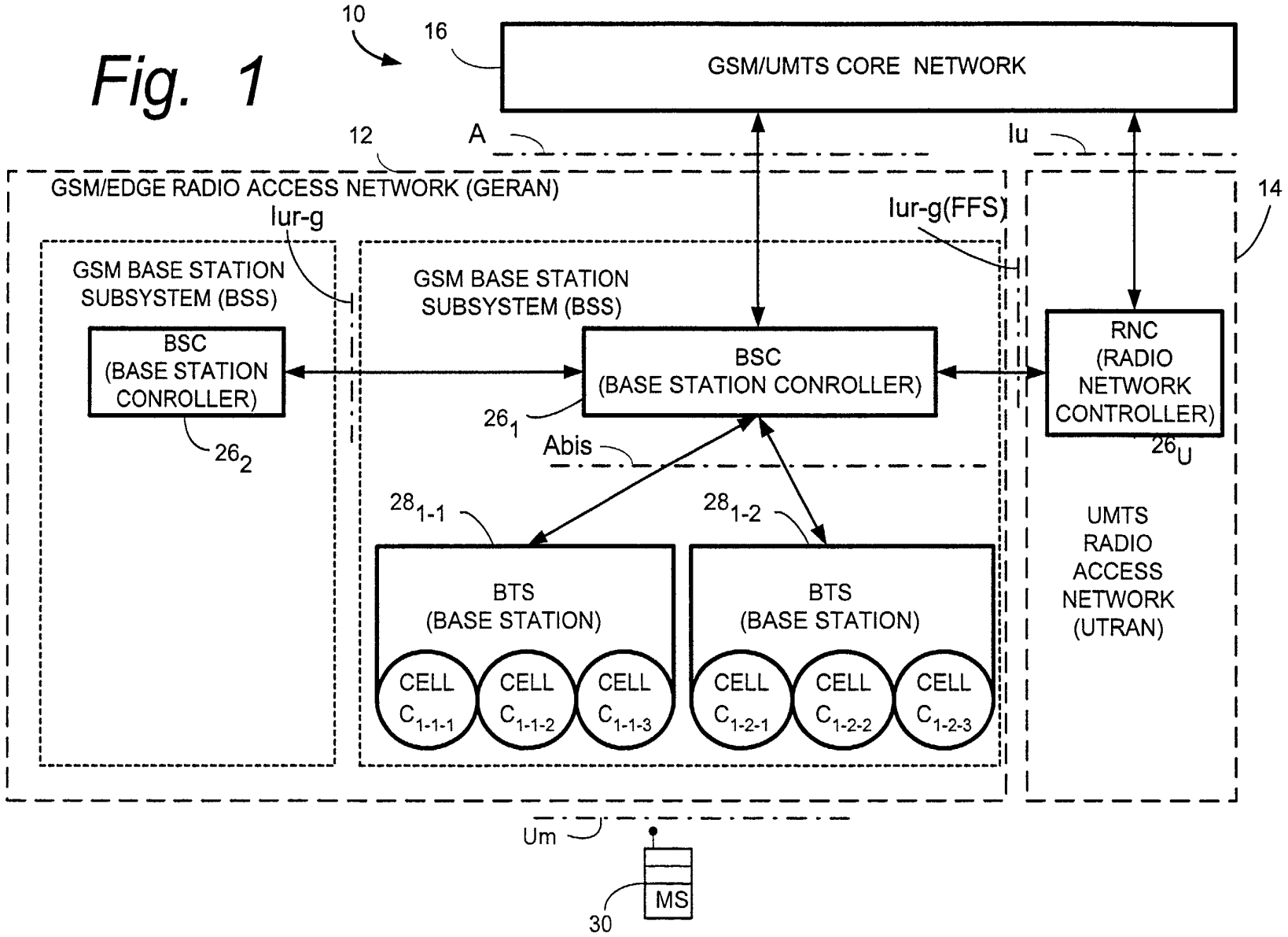
Fig. 1


10
16
GSM/UMTS CORE NETWORK
12
A
Iu
GSM/EDGE RADIO ACCESS NETWORK (GERAN)
Iur-g
Iur-g(FFS)
14
GSM BASE STATION SUBSYSTEM (BSS)
BSC (BASE STATION CONROLLER)
26 2
GSM BASE STATION SUBSYSTEM (BSS)
BSC (BASE STATION CONROLLER)
26 1
RNC (RADIO NETWORK CONTROLLER)
26 U
Abis
28 1-1
28 1-2
BTS (BASE STATION)
BTS (BASE STATION)
CELL C 1-1-1
CELL C 1-1-2
CELL C 1-1-3
CELL C 1-2-1
CELL C 1-2-2
CELL C 1-2-3
UMTS RADIO ACCESS NETWORK (UTRAN)
Um
MS
30

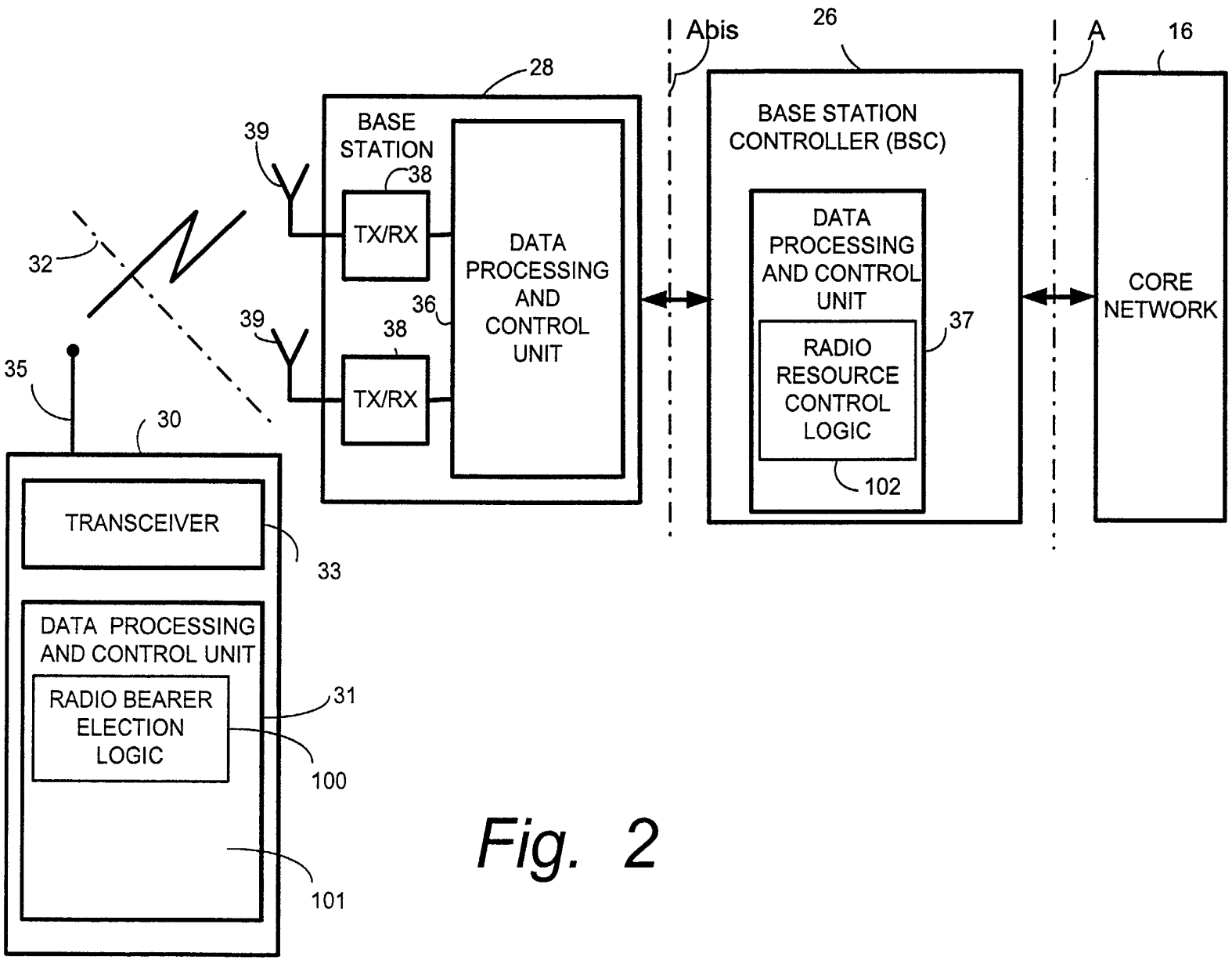

Abis
26
A
16
28
BASE STATION
39
38
TX/RX
DATA PROCESSING AND CONTROL UNIT
36
39
38
TX/RX
32
35
30
TRANSCEIVER
33
DATA PROCESSING AND CONTROL UNIT
RADIO BEARER ELECTION LOGIC
31
100
101
BASE STATION CONTROLLER (BSC)
DATA PROCESSING AND CONTROL UNIT
RADIO RESOURCE CONTROL LOGIC
37
102
CORE NETWORK

Fig. 2

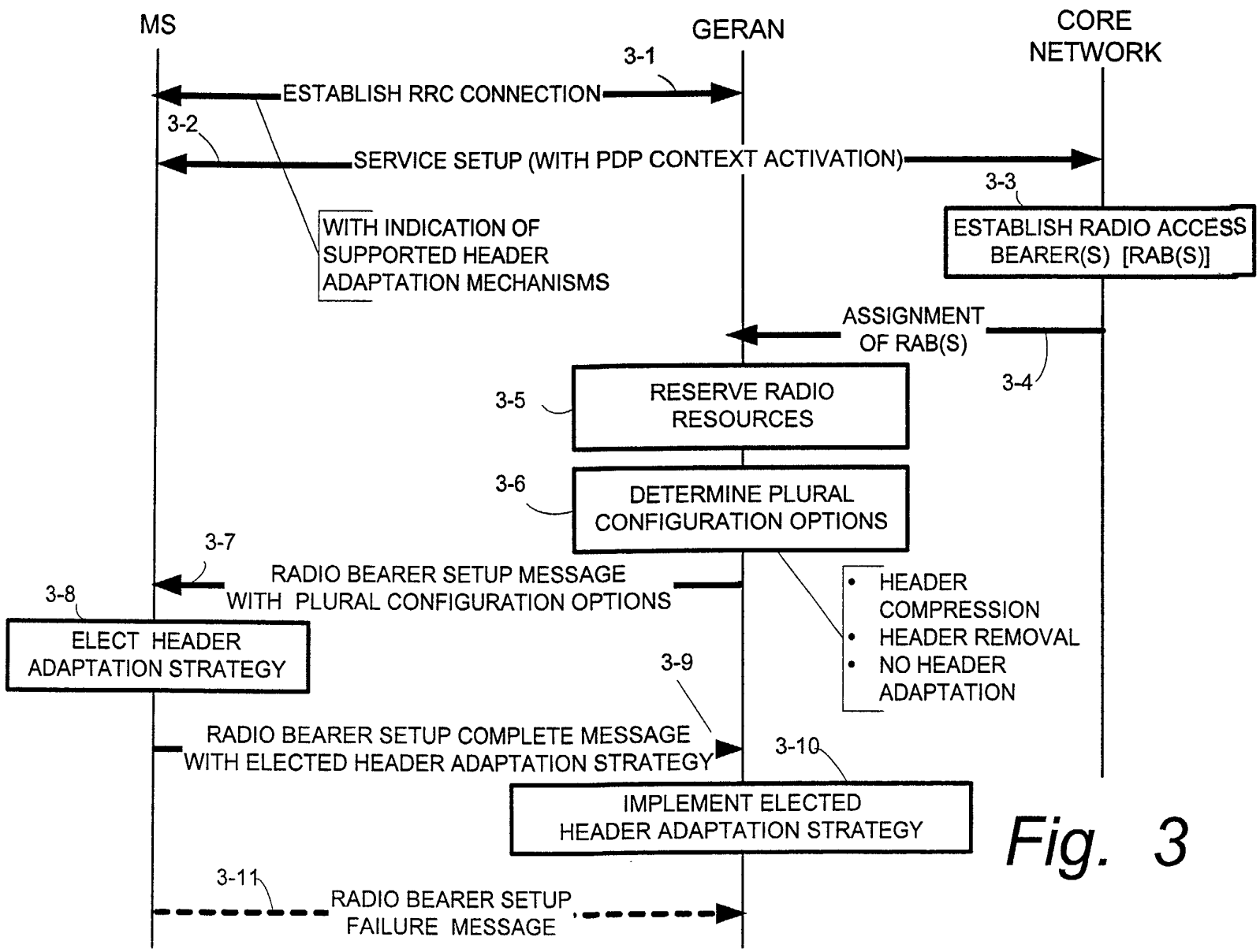

MS
GERAN
CORE NETWORK
3-1
ESTABLISH RRC CONNECTION
3-2
SERVICE SETUP (WITH PDP CONTEXT ACTIVATION)
WITH INDICATION OF SUPPORTED HEADER ADAPTATION MECHANISMS
3-3
ESTABLISH RADIO ACCESS BEARER(S) [RAB(S)]
ASSIGNMENT OF RAB(S)
3-4
3-5
RESERVE RADIO RESOURCES
3-6
DETERMINE PLURAL CONFIGURATION OPTIONS
3-7
RADIO BEARER SETUP MESSAGE WITH PLURAL CONFIGURATION OPTIONS
HEADER COMPRESSION
HEADER REMOVAL
NO HEADER ADAPTATION
3-8
ELECT HEADER ADAPTATION STRATEGY
3-9
RADIO BEARER SETUP COMPLETE MESSAGE WITH ELECTED HEADER ADAPTATION STRATEGY
3-10
IMPLEMENT ELECTED HEADER ADAPTATION STRATEGY
3-11
RADIO BEARER SETUP FAILURE MESSAGE

Fig. 3

TO6020 "EDS4860

Fig. 4A

RADIO BEARER SETUP MESSAGE

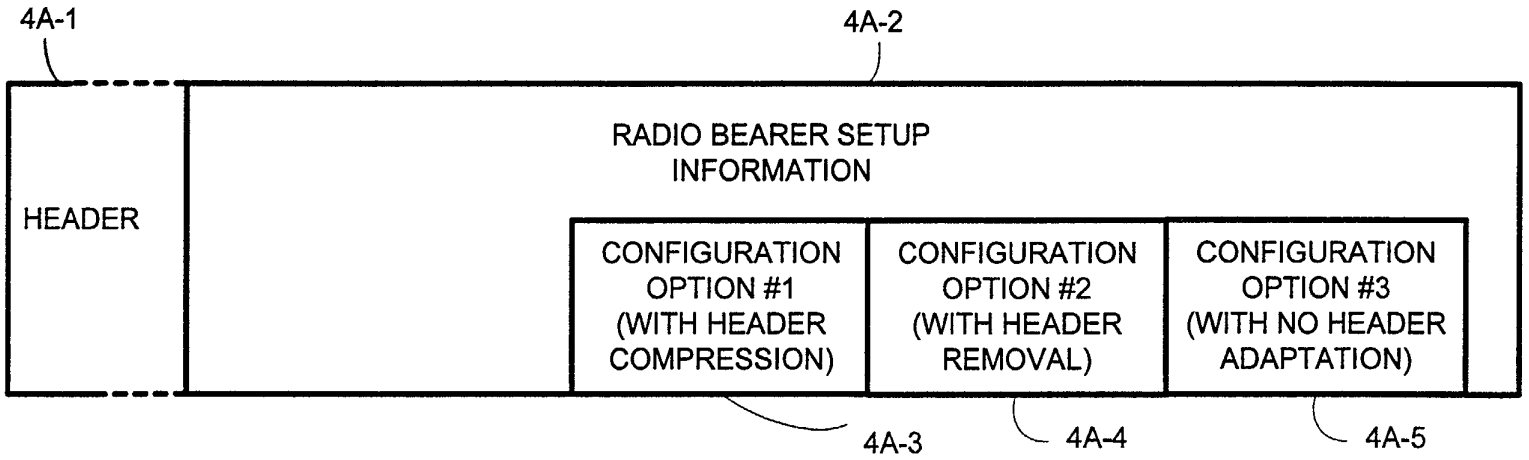
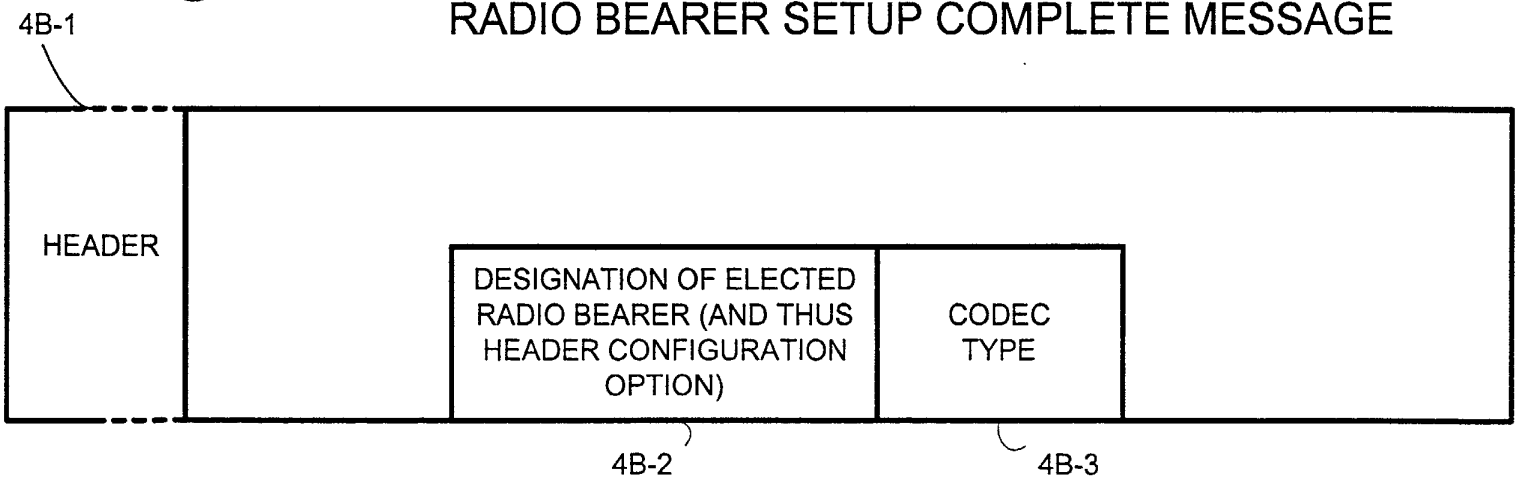


Fig. 4B

RADIO BEARER SETUP COMPLETE MESSAGE



T06020 "hE0Eh860

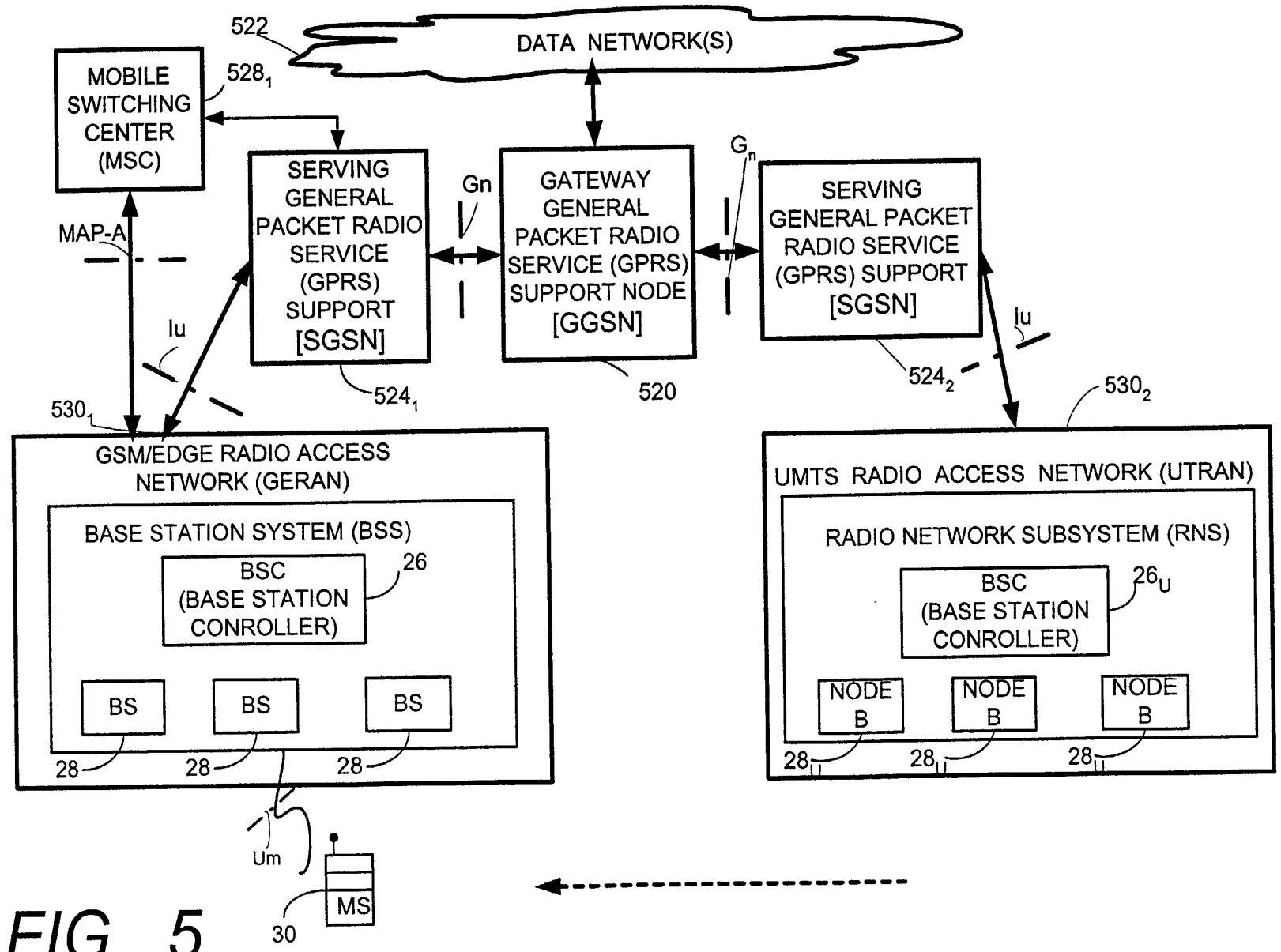


FIG 5

TD6020 "EDS4860

Fig. 6

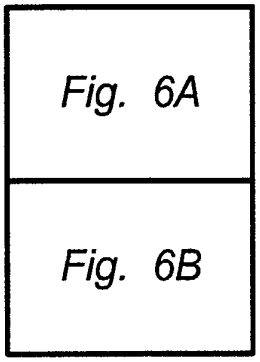


Fig. 7A

TYPICAL IP PACKET

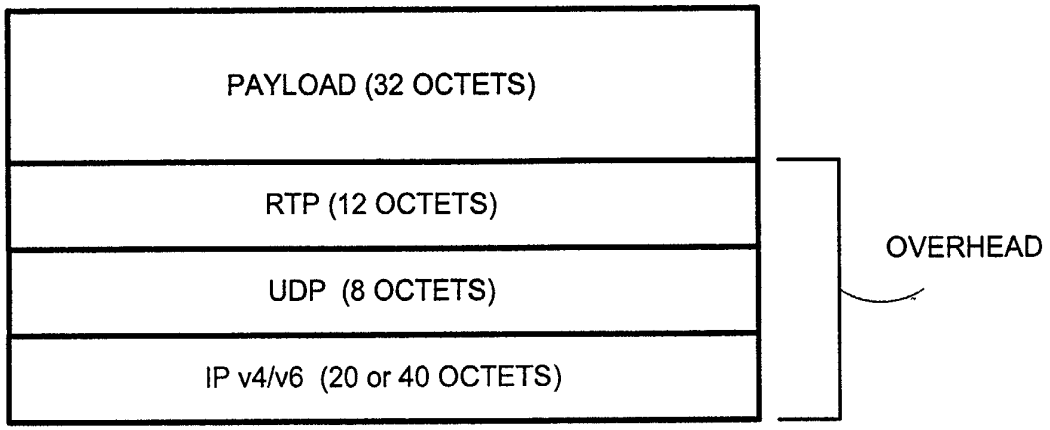
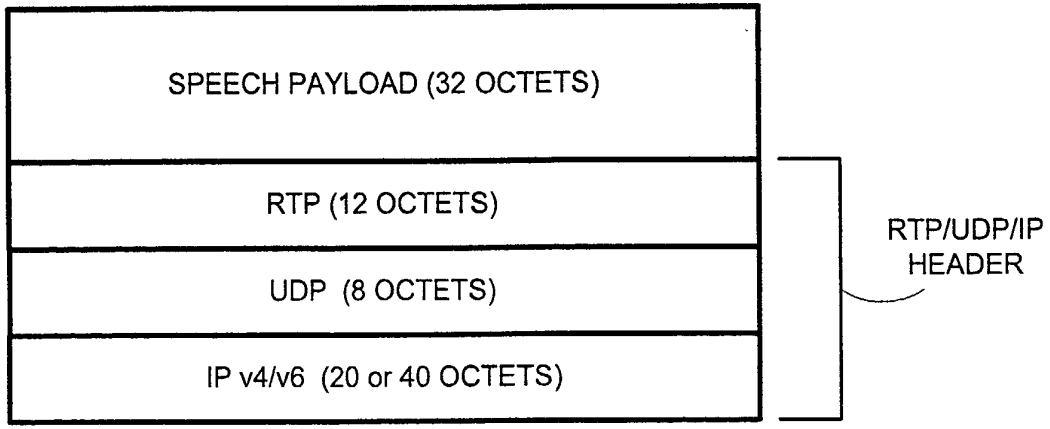


Fig. 7B

TYPICAL IP PACKET FOR SPEECH



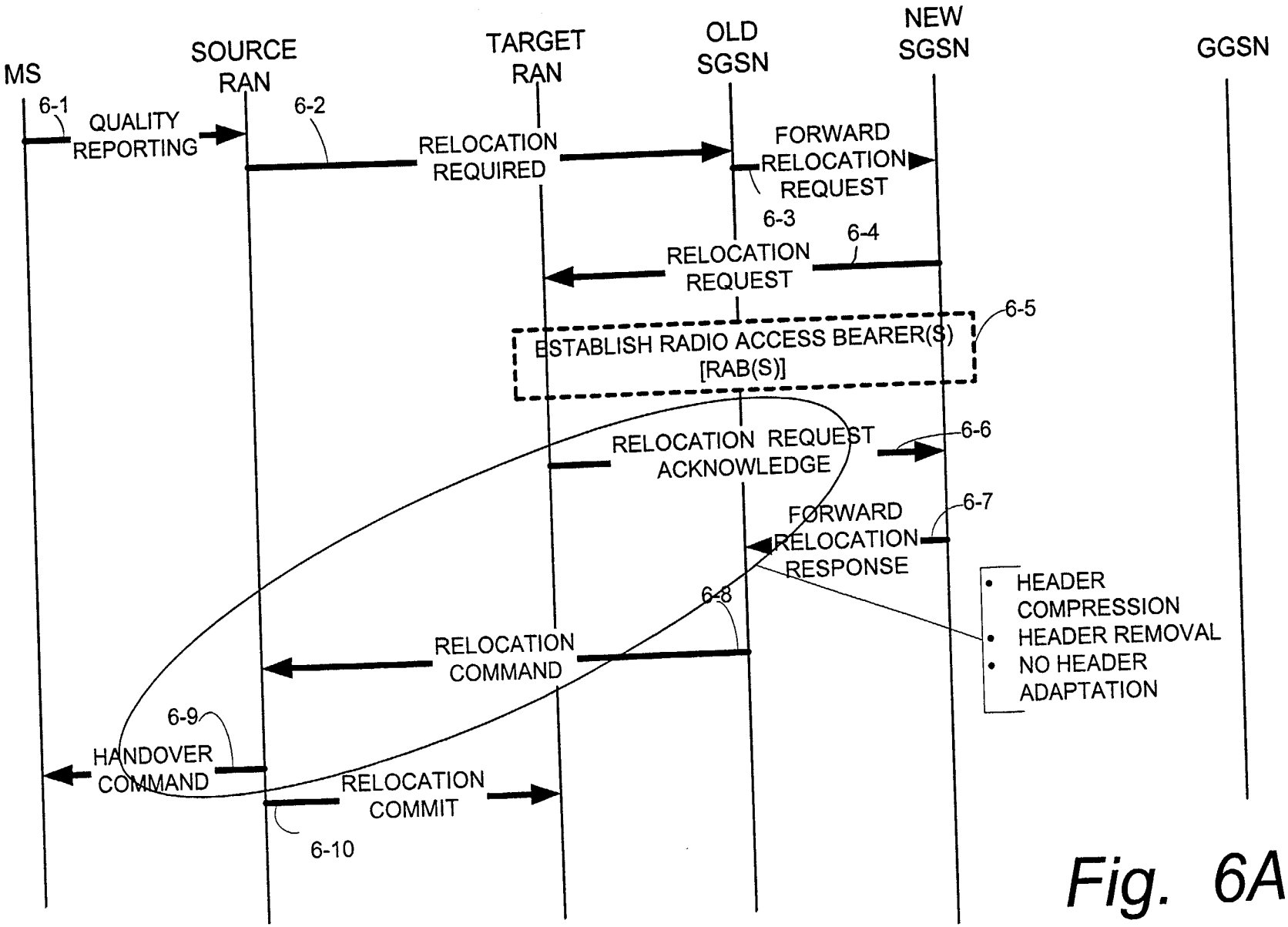

MS
SOURCE RAN
TARGET RAN
OLD SGSN
NEW SGSN
GGSN
6-1
QUALITY REPORTING
6-2
RELOCATION REQUIRED
FORWARD RELOCATION REQUEST
6-3
6-4
RELOCATION REQUEST
6-5
ESTABLISH RADIO ACCESS BEARER(S) [RAB(S)]
RELOCATION REQUEST ACKNOWLEDGE
6-6
FORWARD RELOCATION RESPONSE
6-7
6-8
RELOCATION COMMAND
• HEADER COMPRESSION
• HEADER REMOVAL
• NO HEADER ADAPTATION
6-9
HANDOVER COMMAND
RELOCATION COMMIT
6-10

Fig. 6A

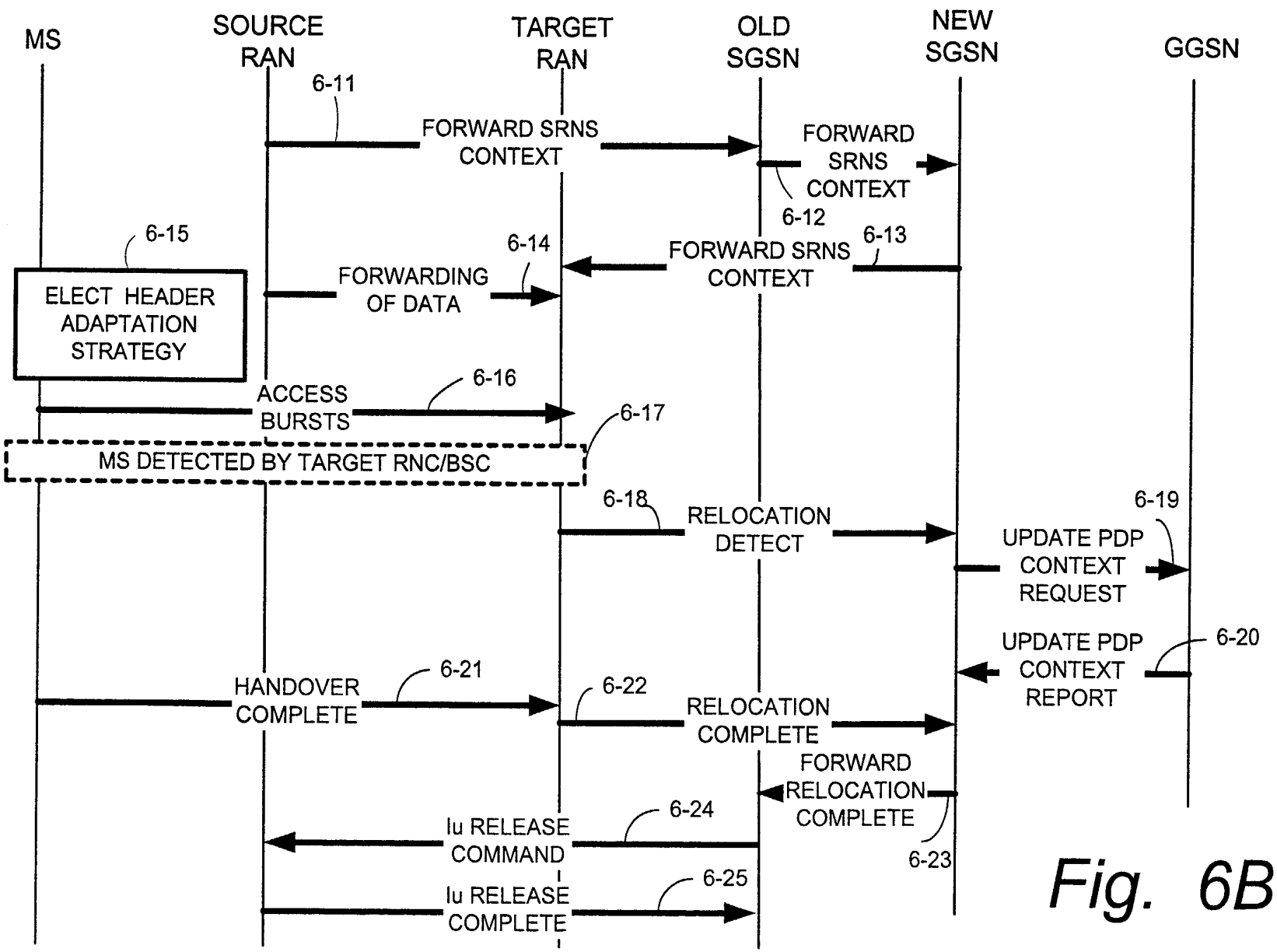

MS
SOURCE RAN
TARGET RAN
OLD SGSN
NEW SGSN
GGSN
6-11
FORWARD SRNS CONTEXT
FORWARD SRNS CONTEXT
6-12
6-15
6-14
FORWARD SRNS CONTEXT
6-13
ELECT HEADER ADAPTATION STRATEGY
FORWARDING OF DATA
6-16
ACCESS BURSTS
6-17
MS DETECTED BY TARGET RNC/BSC
6-18
RELOCATION DETECT
6-19
UPDATE PDP CONTEXT REQUEST
UPDATE PDP CONTEXT REPORT
6-20
6-21
HANDOVER COMPLETE
6-22
RELOCATION COMPLETE
FORWARD RELOCATION COMPLETE
6-24
Iu RELEASE COMMAND
6-23
6-25
Iu RELEASE COMPLETE

Fig. 6B